29.1303
AIR

The Air Line Pilot

MARCH, 1958

LIBRARY OF THE
MAR 25 1958
UNIVERSITY OF ILLINOIS

The Air Line Pilot

March, 1958
Vol. 27, No. 3

Entered as Second Class Matter at the Post Office at Chicago, Ill.
Copyright 1958, by Air Line Pilots Association, International.
ED MODES, Editor AL LEACH, Asst. Editor

◆ ◆ ◆

IN THIS ISSUE

THE VOTING MAJORITY.....Page 3
ESTATE PLANNING FOR PILOTS.....Page 5
AGENDA, AIR SAFETY FORUM.....Page 7
'T' EFFECT.....Page 8
FAREWELL TO 'BIG CUB'.....Page 10
DIGEST OF NEWS AND VIEWS IN AVIATION....Page 11
ALONG THE LINE.....Page 15
ON IMPROVING PASSENGER SERVICE.....Page 17
MEET YOUR OFFICERS.....Page 18
PILOTS' INTERNATIONAL ROLE.....Page 19

◆ ◆ ◆

Clarence N. Sayen
President
Grant M. LeRoux
First Vice-President
Kay McMurray
Executive Vice-President
R. L. Tuxbury
Secretary
D. J. Smith
Treasurer

REGIONAL VICE PRESIDENTS
C. C. Spencer, Jr.....Region I
R. J. Rohan.....Region II
C. E. Luther.....Region III
D. Halperin.....Region IV
H. B. Anders.....Region V

Larry Cates
Legislative Representative

Published Monthly by the Air Line Pilots Association, International, Affiliated with A. F. of L.-C.I.O. Publication offices: 55th Street and Cicero Avenue, Chicago, 38, Illinois.

Advertising appearing in this magazine cannot be construed as being an endorsement by the Air Line Pilots Association or The Air Line Pilot.

Opinions expressed by individual authors in The Air Line Pilot do not necessarily represent official ALPA opinion, unless specifically so stated, and therefore should not be construed as such.

Annual Subscription, $2.50.

66

On the Cover

This Boeing 707 Stratoliner, cruising beautifully near the snow-capped peaks of the Cascade mountains, is the first American production jet transport to take to the air.

The giant 600-mile-an-hour plus Stratoliner is the first of more than 162 Boeings on order by 14 air lines of the world.

"The first production 707 jet transport comes up to all our expectations," says A. M. "Tex," Johnston, Boeing Airplane Company chief of flight test and pilot of the 707 on its initial flight. With him were J. R. Gannett, Boeing 707 project senior test pilot as co-pilot, and T. J. Layne, also a test pilot, was flight engineer.

Development of the first jet air liner to fly has been closely monitored by the ALPA jet aircraft evaluation committee from the design to the production stage. Many of the committee's "cockpit view," recommendations have been incorporated into the airplane.

The 707 is powered with four Pratt & Whitney turbine engines.

It is equipped with combination sound suppressor-thrust reversers on all four of its engines, which also is a new development in jet flying.

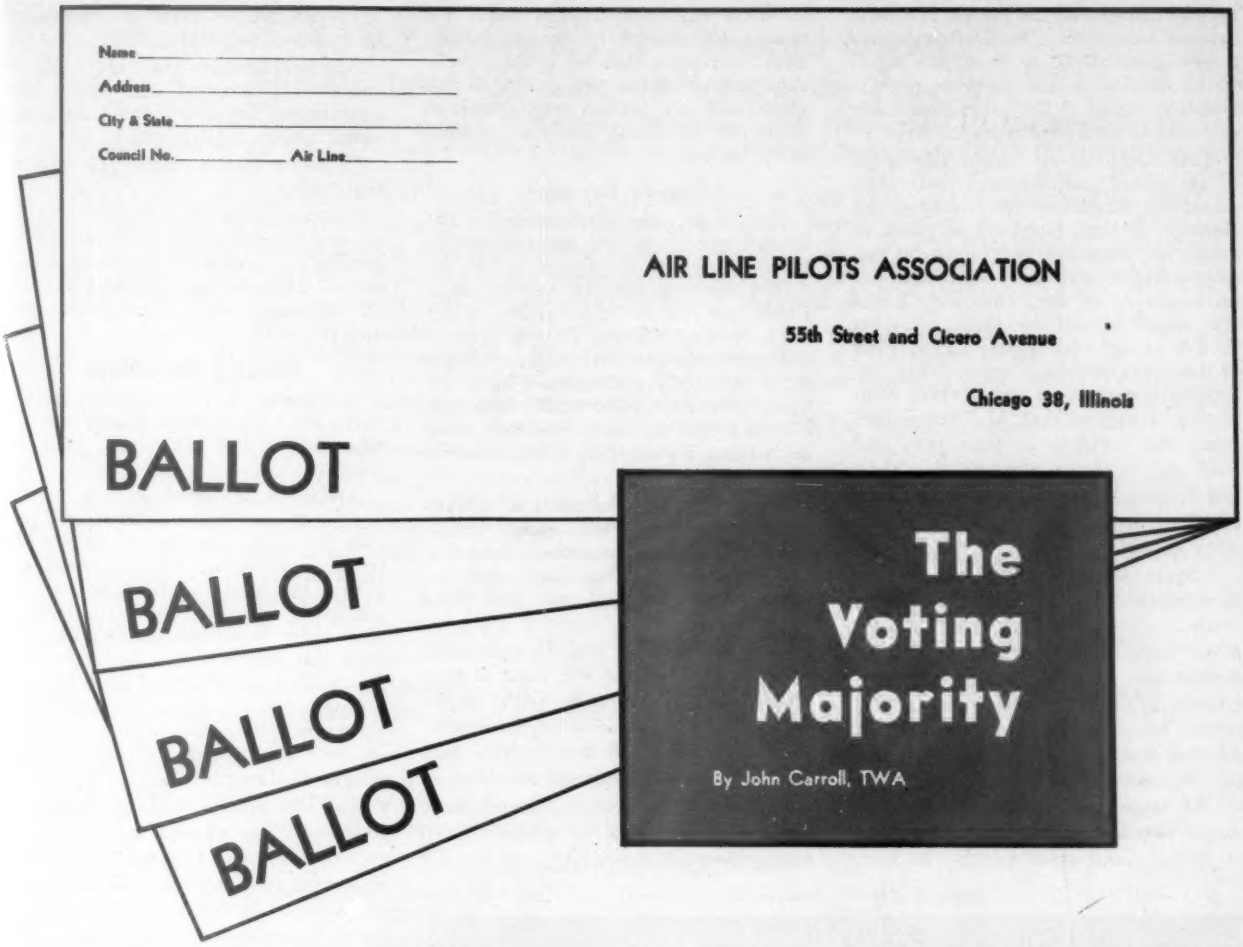
The second Boeing 707 is near completion in the Boeing plant. It will wear the colors of Pan American Airways which two years ago was the first air line to order Boeing 707s. Pan Am will take delivery of its first airplane next year, and will be the first to operate a commercial jet on international routes.

American Airlines will be the first to offer domestic jet service.

The Boeing jet air liner "family," is made up of the Boeing 707 Jet Stratoliner, a long range airplane capable of nonstop transcontinental and transatlantic flights; the 707 International, a very long range airplane which can fly more than 4,500 miles with a full payload, and the recently announced Boeing 720, and intermediate range jet air liner.

Boeing jet airliners are capable of carrying from 80 to 180 passengers, depending on the configuration and interior accommodations of each model.

For more pictures of the sleek new commercial jet, turn to Pages 12 and 13.



The Voting Majority

By John Carroll, TWA

THE abuses, excesses, and downright dishonesty of certain labor union officials has become a matter of public record in recent months. In the past few weeks the Administration's legislative program designed to correct these abuses has been announced by the Secretary of Labor. ALPA members can take pride that this entire suggested program has been our standard practice, at least since the Association was re-organized in 1952. Our current By-Laws provide us with the most democratic union administration in the entire field of organized labor.

We have over 13,000 active members but only about 100 full time employees of whom approximately 80 per cent do clerical work. In no other comparable representing organization is so much of the day-to-day work done by the members themselves. This work is usually done in what was formerly the pilot's spare time and almost always with an out of pocket loss in pay and/or expenses. Furthermore, *all* of the major policy decisions are made either by the Board of Directors or the Executive Committee. In addition, all of the Board of Directors and the majority of the Executive Committee are elected regularly and frequently by direct secret ballot of the total membership.

President's Status

Our ALPA President, who holds our power of attorney, is restricted in its use in our behalf as in no other labor organization. In addition, it has been his standard practice to withhold his signature on any collective bargaining agreement until the participating pilot representatives have indicated their concurrence with the agreement by physically signing the document first.

The net result of our representation has sometimes been less than the ultimate. We frequently elect unwilling representatives. The rate of refusal to serve by our elected representatives has often been appalling. The vast majority of our representatives are inexperienced. We have attempted to overcome some of this inexperience handicap by staggering our elections and lengthening the term of office. An obvious conclusion could be drawn that we should abandon doing the work ourselves and hire "professional," representatives. This is simply recognition that dictatorship can be more efficient than democracy over a short term for a specific project. Unfortunately, exposure to this efficiency of dictatorship always provides exposure to plundering power by the dictator.

So, we in ALPA have sensibly decreed that we will be governed democratically by ourselves, and risk loss of efficiency for the sure gain of honesty and maintenance of complete and absolute control of our own affairs.

Indifferent Members

Your writer submits the premise that we have been efficient enough to have acquired gains to an extent that has resulted in the appearance of appalling indifference by too many of our members. To cite a case in point—the man-

agement of one of the largest domestic carriers submitted a booklet proposing a new method-of-pay to all the pilots in its employ at the very moment it was first seated at the bargaining table with the elected pilot representatives.

This company so judges the tenor of its pilots' complacency that they dared to offer less for flying a jet Boeing 707 than hundreds of pilots of other air lines are making today on piston engine airplanes. Although not an employee of that company, I feel the insult to our intelligence as an ALPA group very keenly. The pilots of that company have answered by returning a strike vote approaching unanimity. I suggest that ALPA members treat this problem as their own and lend the pilots of this air line their full financial, physical and moral support to help solve the problem of their wage inequity.

Almost all of industry and many governmental groups have spewed forth a torrent of indictment against labor representing organizations for demanding (and obtaining) wage increases without a corresponding increase in productivity. You are reminded that one year ago your Board of Directors unanimously reaffirmed ALPA wage policy which has tied our wage rates to productivity factors such as mileage and gross weight. In fact, so much has been written about the treasonable aspects of non-productive wage increases, that we would probably be considered unpatriotic if we abandoned our present wage formulas which are so closely allied to productivity factors.

Finance Reports?

Just after the disclosures in the newspapers about the large-scale pilfering of industrial union funds, an ALPA member stopped me to ask if I was sure that no such raiding of our treasury was possible. It was news to him that our total ALPA finances are given quarterly and annual by a reliable firm of Certified Public Accountants and that this audit and any other accounting information is available to all members.

Your Council Chairman is always mailed a copy of the annual audit. Most of you have seen the continuing and favorable publicity we have received as a result of our past dues refunds.

In conclusion, I find it extremely difficult to reconcile the facts of our organizational structure with statements made by some of our members. You've probably all heard them and maybe have made some of them:

"When are we going to stop letting headquarters dictate to us and start telling *them* what to do?"

"When are we going to start hiring professional negotiators?"

(Jack Christie and his staff of "amateurs," some of whom have been negotiating for more than 20 years, wince visibly on that one.)

"I never had a chance to vote on *that* policy."

"How do you get off declaring me in bad standing—I don't remember getting any notice of that strike assessment." (He did get the ALPA group life insurance rebate check at the same address.)

Meeting Attendance

"Go to the ALPA meeting with you tomorrow? Naw, those things bore me and besides, I've got a golf game arranged."

And so on, ad infinitum!

It is a fact that our By-Laws provide for direct and secret referendum on strike votes and election of officers. It is a fact that our By-Laws provide for these elected representatives to meet every two years in convention to form our major policy decisions. It is a fact that our Board of Directors has just voted to create an Organizational Structure Study Committee to report to them on suggested changes in our ALPA By-Laws.

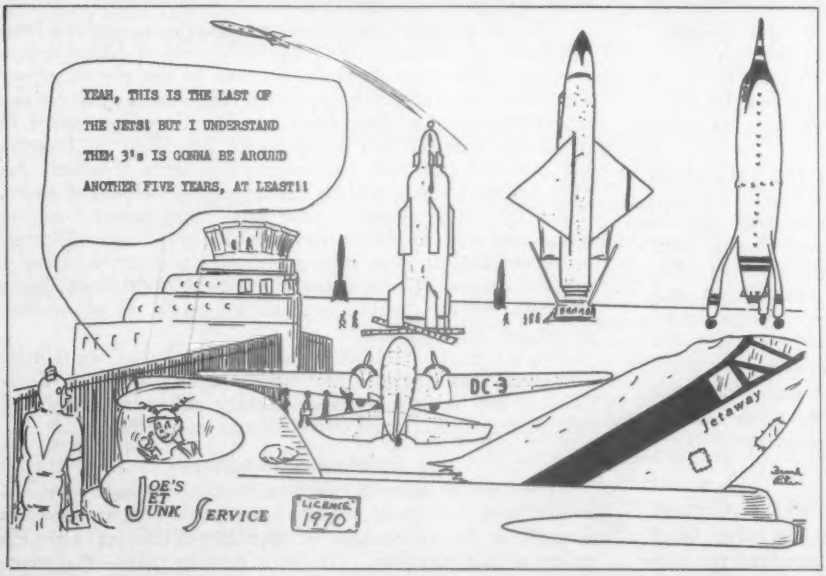
This committee will be appointed shortly by our elected representatives on the Executive Committee and will report to the convention of the Board of Directors in the fall of 1958. If you have suggestions or just complaints about ALPA make-up, this committee will welcome your ideas.

One of our senior pilots at a west coast domicile had a proposal of his, concerning the easing of certain flight pay credit limitations, rejected by his Council. He rather wistfully told me of the incident and of his displeasure with the outcome. I asked him if his displeasure wasn't modified with the knowledge that the majority of his Council did not favor the proposal. He quickly replied:

"But that was only the 'voting majority'."

I leave you with this bit of philosophy that I somehow find rather significant. The "voting majority," is controlling the destiny of ALPA today. This applies equally to the Local Council, the MEC, and the Board of Directors. Successful democratic self-government demands our disciplined acceptance of majority rule for our common good.

Aviation Chuckles


YEAH, THIS IS THE LAST OF THE JETS! BUT I UNDERSTAND THEM 3's GONNA BE AROUND ANOTHER FIVE YEARS, AT LEAST!!
DC-3
Jetaway
JOE'S JET JUNK SERVICE
LICENCE 1970

A Pilot Views . . .

ESTATE PLANNING

By Capt. G. C. Kehmeier
UAL

FOREWORD

The primary purpose of life insurance is to pay death benefits. This fundamental truth needs no argument.

Yet, the 1957 Life Insurance Fact Book, published by the Institute of Life Insurance, shows an incredible relationship. In 1956, for example, the life insurance companies took in almost $18 billion in income, increased their assets to nearly $100 billion, and only paid $2.4 billion in death benefits? Why?

The reason for this relationship is that most individual life insurance policies in force today are primarily long term savings plans. How good are they as savings plans? The 1957 Fact Book gives us a clear-cut answer.

In 1956, the companies spent approximately $3.378 billion for expenses (exclusive of Federal income taxes and profits to the stockholders). During this same period the companies received income from their investments amounting to $2.835 billion (after Federal income taxes).[1]

By subtracting investment income from expenses ($3.378 minus $2.835) we find that expenses exceeded investment income by some $543 million!

Is it possible for any savings institution to provide a satisfactory result when such a relationship exists?

WILLIAM B. RUDD,
Rudd and Co., Sacramento, Calif.,
Underwriter and Author of
"A Formula For Financial Independence.

◆ ◆ ◆

IN the tenth verse of the sixth chapter of his first letter to Timothy, Paul says, "For the love of money is the root of all evil . . ."

Since you became an air line pilot you have been solicited by numerous life insurance underwriters wanting to "tell you about social security," and to "assist you in planning your estate." Life insurance is one of the finest social devices for the economic preservation of the family unit in event the wage earner dies prematurely. On the other hand, life insurance is about the poorest method for an accumulation of an estate if the wage earner lives.

Friendly Chat?

Most life underwriters who drop by "for a chat," are far more interested in their own family than in yours, which is as it should be under contemporary capitalism. Life underwriters are paid on a commission basis. Most of the larger life insurance companies pay their representatives 50% (a few pay up to 70%) of the first year's premium. The larger the premium the larger his paycheck. For the next nine years the underwriter also gets a 5% commission each time you pay the premium.

Naturally he will attempt to sell you an insurance policy which features a savings plan because the savings feature will increase the premium from about 300% on so called ordinary life to as much as 1000% on short term endowments. The sales argument is that the savings is good because the policy will soon have a "cash value" and besides it is a "fine method of saving for retirement."

The top men in the life insurance industry are among the highest paid salesmen in the world. Many earn in excess of $25,000 per annum. This is due to the effective advertising of the large companies, the sales persuasiveness of the underwriter, and to the excessive commission he receives for selling the high premium policies. It is easy to account for the light in the eye of the life underwriter who sold you a Twenty Pay Life and the dogged way he hounded you until you bought, when you realize that the check you gave him for the first year's premium was sooner or later mostly his! No wonder he was concerned for the welfare of your family. He wasn't doing so badly for his own!

Examine Prospects

Before we indulge in any insurance orgies we should carefully examine what we now have or is available to us through:

[1] *The average net rate of interest earned on invested funds for the last 10 years (1947 through 1956) was 3.08%.*

(1) The Air Line Pilots Association.
(2) The Company for which we work.
(3) The United States Government.

For the protection of our dependents in event of our death prior to retirement we have the following available from the Air Line Pilots Association:

1. Group Life Insurance...$10,000
2. Supplemental Group Life Insurance $10,000
3. Mutual Aid.....$ 1,000

Total $21,000

Insurance programs will vary with air line companies. Those of us flying for United Air Lines have the following available for our dependents in event of our death prior to retirement:

1. Company Group Life Insurance .....$ 5,000
2. Cooperative Group Life I.....$10,000
3. Cooperative Group Life II.....$10,000
4. Group Accident-Sickness Insurance.....$ 4,000 (Pays only if killed while off duty)
5. Workmen's Compensation .....*$15,000 (Pays only if killed on duty)
6. Company Pension....amount of your contribution, plus interest, plus capital appreciation on the variable portion.

Totals .....On job death ....$37,500 plus pension
Off job death ....$29,000 plus pension

Total dependency of wife and dependent child or children. There is also a funeral allowance of $400.

From the United States Government your beneficiary would receive in event of your death prior to retirement:

1. National Service Life Insurance (if you are a veteran)...$10,000
2. Social Security . . . If maximum benefits have accrued and you leave a widow with two or more minor children, your widow would receive $200 per month until next to youngest child reaches age 18. She would then receive $162.75 per month until youngest child reaches age 18. No benefits would then be paid until she reaches age 62, at which time she will receive $81.37 per month for life if she has not remarried. For the average pilot with several small children this benefit may be worth over $30,000 in protection.

You can readily ascertain from the totals of the above that your insurance protection could approach $100,000.

For the protection of our dependents and ourselves in event of our disability prior to retirement we have the following available through the Air Line Pilots Association:

1. Mutual Aid (Class II)..$ 6,000 (Pays $500 per month from 3rd to 14th month)
2. Loss of License (Class II).....$17,000 (Pays $500 per month from 15th through 48th month)

Total $23,000

Disability Prospects

For the protection of our dependents and ourselves in event of our disability prior to retirement we have the following available through United Air Lines.

1. Company sick leave amounts to your regular salary for three months if you have accrued maximum credits.
2. Group Accident-Sickness Insurance pays $40 per week for 26 weeks. The principal function of this policy is for hospital and surgical benefits for self and dependents and for major disaster.
3. The Company Group Life and Cooperative Group Life I have total and permanent disability clauses which pay the principal sum in 60 equal installments of $250 each for a total of $15,000.
4. Workmen's Compensation would pay $50 per week temporary disability for 240 weeks maximum, then, $40 per week for a maximum of 400 weeks (if totally disabled) and then a life pension of $18.46 per week (if totally disabled). After 640 weeks this could mean a total benefit of $28,000. This would only apply if disabled on job.
5. If you terminated your employment with United your contribution to the Pension, plus interest, plus capital appreciation on the variable portion would be returned to you if you asked for it.

From the United States Government you would get Social Security after you reach age 50 if you are totally and permanently disabled. You and your wife would get $162.75; if you alone survive, you would receive $108.50; if your wife alone survives, she would be eligible for $81.37 per month.

Retirement

In the event of normal retirement air line pension plans vary. United has had a pension plan since 1940. During the past 18 years the cost of living has doubled and the Dow Jones average has more than doubled. During the same span my wages from air line flying have risen from $2,520 per annum to over $19,000, or a gain of about a thousand dollars per year. Assuming that stocks will appreciate on the average between 3 and 4 per cent per year for the next 20 years and that my wages will increase by $500 per year for the same span my pension will be about $1,400 per month for life if I elect the single annuitant option. In addition to this, of course, I would have Social Security.

Furthermore, our Company has an employee stock plan. For every $100 the employee contributes the air line adds $15 and the total is used to buy UAL common stock. The plan has been in effect five years and will probably continue. It is an excellent way to save money and enjoy the potential appreciation of the stock.

An examination of the insurance available to you both from your premature death, disability and normal retirement indicates that you may already have adequate coverage without additional commercial life insurance. It is not your obligation and it should not be your intention to leave your dependents better off financially than they would have been had you lived. You may be sure that the insurance program available to you approaches adequacy. The cost of this program, excluding the pension, and including sickness and surgical and disability features amounts to less than $50 per month. The cost for the National Service Life and Group Life from ALPA is about $3.50 per thousand per year. The Company Group and Cooperative Life is about $7.20 per thousand per year.

Low Yield Insurance

When you purchase savings type life insurance as a means of creating an estate, you are embarking on a costly, low yield program which provides no hedge against inflation. The cost of the savings element in the average life insurance policy is prohibitive. For example, during 1956 life insurance companies spent more than 22% of their premium income for expenses (one company took over 50%) and they netted only 3.3% on their investments. To put it another way, would you put money in a bank if the bank deducted 22% or more from each deposit and paid you only 3.3% on the balance?

My message is this: If you need additional insurance, buy term. If you want to save money and are making enough to do so, then do it. But don't kid yourself by thinking you can ef-

(Continued on Page 20)

AGENDA
SIXTH ANNUAL ALPA AIR SAFETY FORUM

(March 4-6, 1958)
Chicago, Illinois

FIRST DAY—Tuesday, March 4

9:00 A.M.-11:00 A.M.
ALPA CLOSED SESSIONS (Safety Representatives Only)
INTRODUCTORY REMARKS BY MASTER OF CEREMONIES, **Grant LeRoux (PAA),** 1st Vice-Pres., ALPA.

11:00 A.M.-4:00 P.M.
1.—SEPARATE ALPA SAFETY COMMITTEE MEETINGS:
1. Status of their special committees. 2. Special committee problems. 3. Anticipated committee activities.

11:00 A.M.-4:00 P.M.
1. Central Air Safety Chairmen, **L. DeCelles (TWA).**

11:00 A.M.-12:30 P.M.
2. Airspace Subcommittee Chairmen, **L. Abel (CAP).**

2:00-P.M.-4:00 P.M.
3. Regional & Area Safety Chairmen, **H. Miller (AAL).**

11:00 A.M.-4:00 P.M.
4. ATC Committee, **J. D. Smith (CAP).**
5. New Plane Evaluation Committee, **R. Adickes (TWA).**
2.—REPORTS ON MEETINGS:

4:00 P.M.-6:00 P.M.
1. Central Air Safety Chairmen. 2. Airspace Subcommittee Chairmen. 3. Regional and Area Safety Chairmen. 4. ATC Committee. 5. New Plane Evaluation Committees (Boeing 707, DC-8, CV-880, Electra, F-27).

8:00 P.M.
"FLY BY" OF ANTI-COLLISION LIGHTING SYSTEMS: "Fly By" of recommended lighting systems. (Location of lighting demonstration will be lake front directly east of Shoreland Hotel.) Industry invited.

SECOND DAY—Wednesday, March 5

9:00 A.M.-10:00 A.M.
FORUM OPEN TO INDUSTRY, **Grant LeRoux,** M.C.
WELCOME, **Clarence N. Sayen,** President, ALPA.

10:00 A.M.-12:30 P.M.
POSITIVE TRAFFIC SEPARATION AND AIRSPACE UTILIZATION—**J. D. Smith,** Panel Chairman.
ALPA's Program—**J. D. Smith,** ALPA ATC Chairman.
CAA's Views—**J. Pyle,** CAA Administrator.
U. S. Air Force Views—**Col. Lawrence S. Lightner,** USAF.
ATA's Views—**Milton Arnold,** V.P. ATA Operations.
AMB's Views—**E. S. Quesada,** Chairman AMB.
General Aviation Views—**J. B. Hartranft,** AOPA President.

12:30 P.M.-2:00 P.M. LUNCH

2:00 P.M.-3:00 P.M.
POSITIVE TRAFFIC SEPARATION AND AIRSPACE UTILIZATION—QUESTION AND ANSWER PERIOD.

3:00 P.M.-5:30 P.M.
CAA AND CAB'S ENFORCEMENT POLICY—DOES IT PROMOTE SAFETY OR INCREASE HAZARD?
1. The Pilot's Viewpoint—**Kay McMurray,** ALPA, Executive Vice President. 2. The ATA Viewpoint—**W. Becker,** Director of ATA Operations. 3. The CAA's Viewpoint—**Roy Keeley,** Dir., Flight Operations, CAA. 4. CAB's Viewpoint—**Oscar Bakke,** Dir., Bureau of Safety, CAB.

8:00 P.M.
BANQUET—Speaker, **Louis S. Rothschild,** under Secretary of Commerce for Transportation. **E. Bechtold (EAL),** Master of Ceremonies.

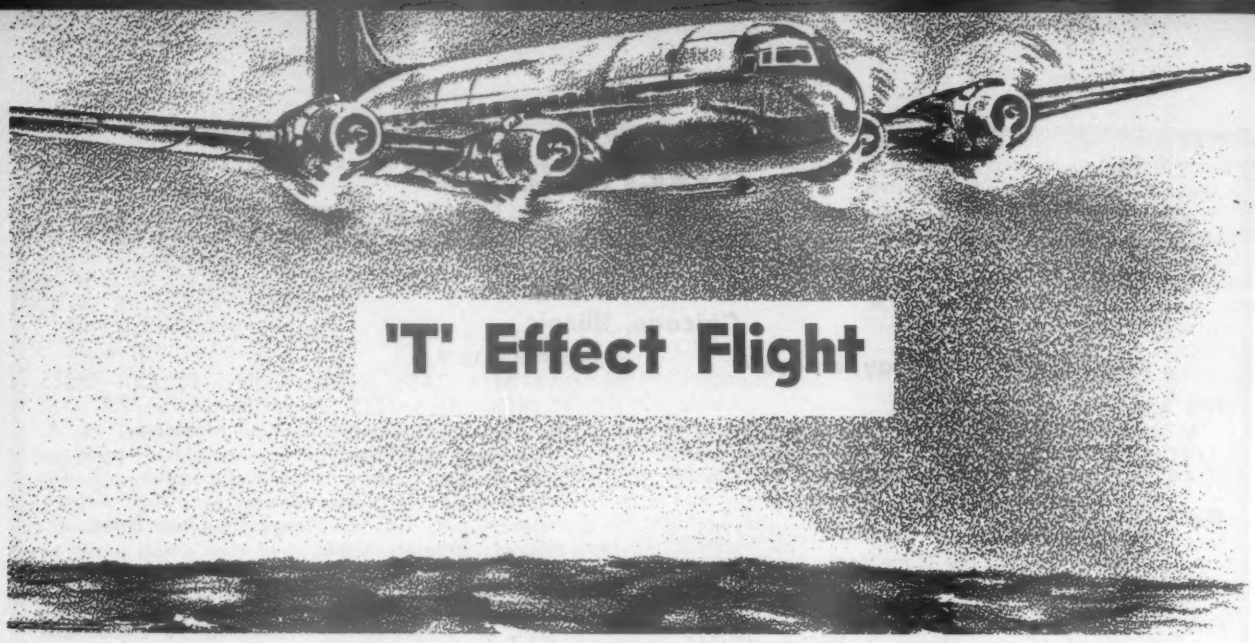
THIRD DAY—Thursday, March 6

9:00 A.M.-12 Noon
PILOT TRAINING—**E. R. Watson (EAL),** ALPA, Panel Chairman.
ALPA's Views on Training Requirements—**E. R. Watson.**
SAC's KC-135 Transition Experience. USAF (SAC)
CAA Oklahoma Training Center—Training for Optimum Performance—**John F. Kempf, CAA.**
TCA Ground Training on Turbo-prop Aircraft—**Ron Peel (TCA).**
High Altitude Indoctrination Training—**Dr. C. I. Barron, Lockheed,** and **Dr. H. Fenwick.**

12 Noon-1:00 P.M. LUNCH

1:00 P.M.-4:00 P.M.
RUNWAY REQUIREMENTS FOR AIR CARRIER OPERATIONS—**E. A. Cutrell (AAL),** Panel Chairman.
Runway Visual Aid Requirements—Pilots' Viewpoint—**E. A. Cutrell,** ALPA Runway Lighting Chairman.
Runway Length Requirements for Performance—**L. H. Mouden (BNF),** ALPA Performance Chairman.
4R-22L Instrument Runway Development at New York International Airport—**H. O. Fisher,** Port Authority.
Runway Construction Criteria—Portland Cement Association—**Gordon K. Ray.**
Runway Construction Criteria—Asphalt Institute—**Charles A. McKeogh.**
CAA's Viewpoints on Runway Length and Construction Requirements—**H. H. Howell,** Airports Director.
Air Carrier's Viewpoint on Runway Requirements—**David Little (AAL), W. E. Rhoades (UAL).**

4:00 P.M.-5:30 P.M.
MID-AIR COLLISION PREVENTION—**R. A. Stone (UAL),** Panel Chairman.
Proximity Warning—**Richard Lorge, Aerojet Corp.**
Collision Avoidance by Day and Night—**W. Atkins (NWA).**
UAL's Aircraft Exterior Lighting, (including display of lighted airplane models)—**John Tillman (UAL).**



'T' Effect Flight

By Maj. Joseph P. Tracy
Editor, Pacific Air Forces "Flyer"

HERE are a few excerpts from a local newspaper that you may remember. They were written and published on 8 August 1957, and dealt with the exploit of Major Samuel Tyson and his struggle to nurse a crippled C-97 for something over 1,000 miles across the Pacific:

"With both of its left engines dead, a MATS C-97 carrying 67 persons struggled more than 1,000 miles across the Pacific today and landed safely at Hilo at 11:24 a.m. . . . The outboard engine on the plane's left wing had no propeller whatever, and the adjoining engine was missing about half of one of the propeller's four sections. . . . He ordered all baggage jettisoned from the plane which was then flying at 8,000 feet and then took it down to 100 feet to get better winds . . ."

That is reasonably factual reporting. As a matter of fact, it is more accurate than many accounts of aeronautical feats that we've read in the past. But, Sam Tyson didn't go down to 100 feet to get better winds. On the contrary, he took the big bird downstairs to hunt for a thin stream of air that we can the "T-Effect" area. He knew that if he could locate it, he'd be able to gain sufficient airspeed and save enough fuel to get to Hilo.

Not "Ground Effect"

Aeronautical engineers have long touted the advantages of "Ground Effect." Most of you who fly have been exposed to the theories surrounding this apparent phenomenon and, as a matter of fact, each time you take off or land, you are experiencing the reaction of ground effect. However, it is our intent in this article to point out the difference between ground effect and this second phenomenon that we have arbitrarily labeled "T-Effect." Some may wish to call it "water effect." By any name, it's a part of the air close to the surface of the sea, and isn't something created by the aircraft passing through the air, as is the case with ground effect. It has been our experience that T-Effect can be found and used advantageously at an altitude far above the "ground cushion," level. The theories propounded by aeronautical engineers, dealing with the percentage of wing span to altitude, in determining ground effect, simply can not work when hunting for T-Effect.

In discussing the flight with Major Tyson shortly after his landing at Hilo, he pointed out that his knowledge of this phenomenon went back quite a number of years but that he had never had occasion to put the effect to work. Perhaps we should say, he had never utilized the help knowingly. That too applies to a great many flights that were conducted with B-29s in this theatre during World War II. Some of you will remember the 100-foot level runs that were made for hundreds of miles. It would appear now that the pilots were taking advantage of T-Effect and actually did not realize it.

To point out the advantages gained by Tyson on his low-level flight, the following figures are presented. It should be noted that he had jettisoned all mail and baggage from the C-97 before seeking the T-Effect area.

Altitude	Mani-fold	RPM	IAS	Fuel Flow/Hr.
150′	44	2,350	150	3,000#
50′	42	2,350	150	2,800#
100′	39	2,350	165	2,600#

Optimum Performance

From the above, you will note that as he rode into the T-Effect stream at 100 feet, he was able to reduce power down to 39 inches, picked up 15 mph in airspeed and dropped the fuel flow to 2,600 pounds per hour. Now, if the ground effect theory is correct, he should have been able to descend still lower and thereby enjoy more efficient operation. As you can see, it didn't work out that way.

Interestingly enough, when Maj. Tyson radioed his plight, the 1502nd Air Transport Wing (MATS) Commander, Colonel Andrew Cannon, immediately fired a message back to Major Sam and suggested that he get on downstairs and try an altitude of 75 feet. The reason? Simple enough. Colonel Cannon has as much flying boat time as any man in the Air Force. Probably a lot more. He knows that there is one area close to the sea where maximum efficiency can be derived from any flying machine. All he wanted Sam to do was get down and find it. What he didn't know was that Major T. was already feeling for it. And, believe us, it is absolutely necessary to feel out the effect. We'll get into that a bit later. After our discussion about the advantages of low-level flying, we commenced to wonder if there could be a difference between ground-effect and this new phenomenon. If Major Tyson's theory was right, then the slip-stick lads were way off base insofar as over water flight was concerned.

The Commander in Chief, PACAF, evidenced a definite desire to see the theory explored further (that's how we got into the act) and the Boeing Aircraft Company decided that it was high time to run some additional wind tunnel tests. The Commander of the Military Air Transport Service too declared it was time to know more about the low altitude effects of over water flying. He directed that his people at West Palm Beach get on the ball and run some comprehensive test flights. So, all in all, Maj. Tyson stirred up quite a kettle of fish.

Must Fly It

Right here we would like to point out that this report is based on what we know to be correct, plus, what we have observed recently. We do not believe that wind tunnel tests can be the answer. If you can show us how a true reproduction of sea effects can be arranged within a wind tunnel, then we'll have to go along with the act. Further, to the best of our knowledge, tests conducted in Florida (to date), have been made over a lake. To us, this is unrealistic. Too many factors would enter into such operations to allow for accurate findings . . . proximity of land masses . . . temperature variations caused by nearby terrain . . . relative shallowness of the water . . . to name but a few. There is but one logical way to find out the how come and how to of a problem like this. That is to get out there and fly it yourself. This we did and, there we ran into trouble.

In the first place, we started off by discussing ground effect with the pilots of the 76th Air Rescue Squadron, here at Hickam. All the chopper lads are familiar with the phenomenon as they use it constantly. But, all of them felt that ground effect, as applicable to a fixed-wing aircraft, was something again. In essence, they are correct, for the helicopter creates an inverted bowl of compressed air under the rotor blades, while hovering. The conventional aircraft also compresses a given amount of air while flying in ground effect, but many other factors enter into the picture.

The Commander of the 76th ARS, Major M. V. Frederickson, suggested that we get together and make some comprehensive tests with an Air Rescue C-54. By the very nature of their mission, he believed that any additional information on water effect (T-Effect) would be money in the bank. Consequently he arranged for a combination test-and-training flight to be made available for our benefit and went along himself to fly and see!

The following table reflects our findings:

Altitude	Manifold	RPM	Temp.	IAS	TAS
500′	25	2,300	25C	136	139
100′	25	2,300	25	135	138
80′	25	2,300	25	132	135

Flubbed Method

This, as you can see was somewhat disappointing. We tried several runs at varying altitudes and power settings and further, simulated power-off on one and two engines. Results remained

Airspeed Decreases

At 80 Ft.—Backside Power Curve

constant. As soon as we approached the surface of the sea, two separate conditions were immediately apparent. First, air speed would continue to decrease and second, in the neighborhood of 50 feet or less, we would experience a sucking action or moment, that felt as though the aircraft was being drawn toward the surface. Such a feeling is unpleasant, to say the least.

There was actually a third factor not noticeably apparent while flight checking for the water effect. And, it was only after reviewing our runs that we commenced to take cognizance of same. This was the pitching moment evidenced reasonably close to the sea and as ultimately determined, the one factor we mishandled and thereby failed to recognize T-Effect when we were in it.

On each low-level run, after power stabilization, we would note that the aircraft would alternately change from nose heavy to tail heavy and make the corresponding trim correction. Immediately, the airspeed would decrease and several times it was apparent that we were getting on the wrong side of the power curve. As we will show in a moment, that was a mistake on our part. We should not have trimmed and retrimmed the aircraft.

As they say in the publishing business, we sat on the thing for a couple weeks and decided to wait until we could talk with Major Tyson again. As far as we are concerned, we're not skeptics, we were just confused. Something was very wrong with our findings.

A few days ago Major Sam came through on a MATS run and we got together. We showed him our findings and suggested that it might take another flight test to prove or disprove the theory. Tyson agreed immediately. He pointed out that we had used the wrong technique in finding and utilizing T-Effect.

"You've got to hand-fly the beast," he said. "The minute you try to trim the aircraft for a no-load condition on the elevators, you've defeated the purpose of the whole thing because trimming changes the effective angle of attack of the airfoil and increases drag. End result? Decrease in air speed and if carried far enough, an ultimate positioning of yourself on the back side of the power curve."

On 3 October 1957, a test flight was set up, utilizing a PACAF C-54 and crew. Basically, Major Tyson reasoned that a couple skeptics at the controls would be the proof of the pudding. Captains M. L. Kuzuma and John H. Penn were the assigned drivers and Major William Dunn was along to act as navigator. Colonel Cannon, 1502nd ATW Commander had already declared his intentions and was with the little group as was Major Tyson and myself.

It took five hours to give each pilot a chance to feel out, recognize and then fly in the T-Effect area long enough to establish the validity of its existence.

Skeptic?

Now, we know there are going to be many who will doubt the validity of the following figures. Call 'em skeptics if you will. The engineers will argue pro and con and there will be a great shaking of slip-sticks and all such nonsense. (We're reporting what we found.) Tyson proved the T-Effect theory by keeping sixty-seven people alive. He proved it to us the other day. Certainly this article doesn't reflect Air Force policies, directives or regulations. This is just stuff that we found. Incidentally, we had two Senior Pilots and three Command Pilots on board. That represents more than a little experience.

(Continued on Page 21)

Farewell To 'The Big Cub'

By Lesley N. Forden

OUR contract-carrier air line is finally getting delivery on those brand-new two-million dollar pressurized airliners we ordered two years ago — the replacements for our tired old DC-4s. The new machines are mighty pretty, but some of us diehards who grew up with the "Skymaster," are dubious. The old DC-4 workhorse supported us pretty well for 12 years, and we hate to see it turned out to pasture.

The *Factory Man* is chasing our *Cabin Equipment* gang out of the new planes, telling them they can't change the floor plan and seating on them as they did on the DC-4.

"You go drilling holes all over the place," he warns, "and you'll go right through a hydraulic system somewhere!"

Fleet Service is getting new vacuum cleaners, the new Chief Stewardess is writing a new manual, and the Chief Pilot worked the entire weekend on the Ops Manual revisions. (CAA is getting hard to get along with.) "Mahogany Row," is calling one staff meeting after another and Sales is protesting, "but we hauled almost *that* much in the DC-4!"

Load Factor Same

And Sales is right about those loads. We stripped out cargo DC-4 down to just over 37,000 empty, and carried 21,000 pounds stateside and 17,000 overseas. Passengers we crammed in 80 at a time — in the old days, a coach flight was a coach flight. Now even our military charters call for aisle room, leg room, magazines and hot meals. Practically first class, at coach rates.

We crammed in freight that the book said wouldn't go through the door, and sometimes I wondered if we didn't figure weight and balance the way the Troop Carrier boys did it during the war: Check the tires and struts and if it would taxi, they'd take it.

During the Korean War, some 60 civilian DC-4s carried everything out to Tokyo from bazooka rockets to Congressmen, and we still talk about the cargo job that got loaded twice before it left California . . . The pilots complained all the way about takeoff and climb, but all four engines were high time, and the ship was known as an old dog anyway. Then they unscrambled the manifests on arrival at Tokyo, and figured the DC-4 had been about five tons overloaded . . . And of course the Dew Line Pilots, and the Berlin Airlift veterans tell bigger overgross stories than that one.

DC-4 History

Douglas built the first DC-4 in 1938, strictly as a 44-passenger air line development. This prototype was later sold to the Japanese government, complete with its triple fins and rudders. The State Department approved the sale, possibly aware that no Douglas product would last long with Connie type tailfeathers. And sure enough, the Japanese dumped the original "Mainliner," in Tokyo Bay long before Pearl Harbor.

In early 1942, the Air Force took delivery on the first C-54 and in the next four years some 1,300 were built, including a few postwar civilian DC-4s and Canadian "North Star," versions. Standard C-54 engine was the Pratt and Whitney R2000, while the Canadian models had Rolls Royce in-lines in various faster and heavier models. Estimates vary as to the number of C-54s still in service but the number is probably around 500.

The C-54 carried its share of Kings, Presidents and Prime Ministers during the war, and one carried me, a GI, out to Guam. Impressed with the size of the airplane, I went forward to the flight deck expecting a scene of feverish activity: perhaps something out to Hollywood, with alert, watchful men checking dials and gauges and turning valves and levers. Well — you've been there, so you know.

It hasn't changed a great deal on our present Pacific run. Gross weight has gone up around fiive tons, to 73,800 pounds and gas capacity has almost doubled, to 3,500 gallons. (This usually includes enough for Grandma.) The airplane has stretched, but the crew has diminished: the radio operator and flight engineer are gone and now only two pilots and a navigator argue over the one bunk and threaten an emergency if the Loran or autopilot goes out.

The DC-4 flies cheerfully as a trimotor and many have flown hundreds of miles with two feathered on one side.

Love That Airplane

I suppose those handsome new airliners will eventually become old and battered and beloved like the DC-4, but right now I can't visualize their spotless interiors full of cattle for Karachi, hogs for Lahore or monkeys out of Manila. But I suppose that time will come—after all, the Senior pilots had to progress from goggles, to golf knickres, to tailored uniforms.

There is talk that our outfit will keep one DC-4 to deliver spare engines when one of the new prima donnas throws a shoe at a place like Wake Island. When that happens, I'll go along, and after we unload the spare parts and taxi away from the grounded super-liner, I'll lean out the door and thumb my nose and yell, "Watch the Fours go by!"

Third Dividend On ALPA Dues Declared

A FAVORABLE Association financial position existing at the end of fiscal 1957 (Sept. 30), has made it possible to declare a dues dividend again this year—the third consecutive one.

After reviewing the financial report of the Association at its regular quarterly meeting in February in Miami, the ALPA Executive Committee passed the following resolution:

"Resolved that a dues dividend be paid to each member in good standing as of March 31, 1958, and that such dividend be paid on a basis of 5.22% of each member's adjusted dues paid for the calendar year 1957."

Sum Totals $106,000

Funds available for dues dividend distribution this year total $106,000, a sum sufficient to produce individual refunds ranging from $3.13, for those in the lowest bracket and $19.52, for those paying at the highest dues rate. As stipulated in the Association's Constitution and By-laws, the dividend will be paid on May 15, 1958, to all members in good standing as of March 31, 1958.

The dues refund is set up as part of the Association's overall financial structure under Article IX, Sec. 7, of the Constitution and By-laws, which provides:

"At the end of each fiscal year, whenever total income exceeds total expenses, such net income, up to an amount not to exceed 15 per cent of the total expenses for that fiscal year, shall be credited to the Association reserves whenever its net worth is less than $2,500,000.00, or is less than an amount based on $275 per capita of its dues-paying membership.

"When reserves are at the maximum specified in Section 6, of this Article, or have reached the maximum after part or all of the aforementioned 15 per cent has been transferred to said reserves, the Executive Committee may place the balance of the 15 per cent into a Reserve Benefit Fund.

"Such fund shall not exceed $1,000,000, or $100, per capita, whichever is greater, and must be utilized solely for the payment of such benefits as are authorized by the Board of Directors. The Board of Directors may authorize assessments to replace any monies drawn from the fund.

Prorated Refund

"All net income not so transferred shall be returned to the membership in good standing in the form of a prorated refund payable to those dues-paying members of record as of March 31, of the following calendar year, who are in good standing and have made their annual dues adjustment, if required.

"Proration shall be on the basis of total dues paid for the preceding calendar year. Such refund shall be payable not later than May 15, of the same calendar year. In the event serious financial losses are suffered by the Association, the President may ballot the Board of Directors for approval to credit all net income to net worth and reserves."

The current ALPA dues structure, incorporating the dues dividend, was adopted by the Board of Directors at the 13th Convention on the basis of a long-term study by the ALPA Dues Evaluation Committee of ways and means of stabilizing the Association's financial structure without impairment of representing effectiveness.

Prior to that time, there had been seven major changes in Association dues and many more minor ones with alterations being made at practically every convention.

Fundamental and primary objectives of the current ALPA dues structure are:

- To provide sufficient funds for efficient administration of the Association and effective membership representation.
- To provide reasonable and necessary reserves for contingencies which may arise.
- To provide a sound financial basis to insure Association and growth and expansion.
- To equitably distribute the financial obligation of Association membership by means of the percentage of income method.
- To provide a flexible and self-adjusting dues structure, accurately relating dues to changeable costs of operations without the necessity of revising the basic dues (1.5% of income) periodically.

In three years of operation, the ALPA dues structure and the dues dividend system has proven a capable vehicle for accomplishing these objectives.

Rocket Hazards

"Amateur rocketry," is becoming a new hazard to air travel, and the Civil Aeronautics Administration has warned that all proposed launchings should be discussed with its safety inspectors.

Over the country, enthusiastic young amateur scientists are proposing to launch rockets. Some of these blow up and endanger the operators, and some never get high enough to be dangerous.

If, however, they are launched anywhere along the airways, or in the vicinity of airports, they are the proper concern of the CAA, charged with safety in flying.

Recognizing the possible hazards involved, James T. Pyle, CAA Administrator, has warned that all proposed launchings should be discussed in advance with CAA inspectors as well as local police and fire department officials.

Still more important to the rocket launcher, the CAA points out, is his legal liability if a plane is struck by his rocket. He could be sued for damaging or even endangering a plane in flight, CAA officials believe.

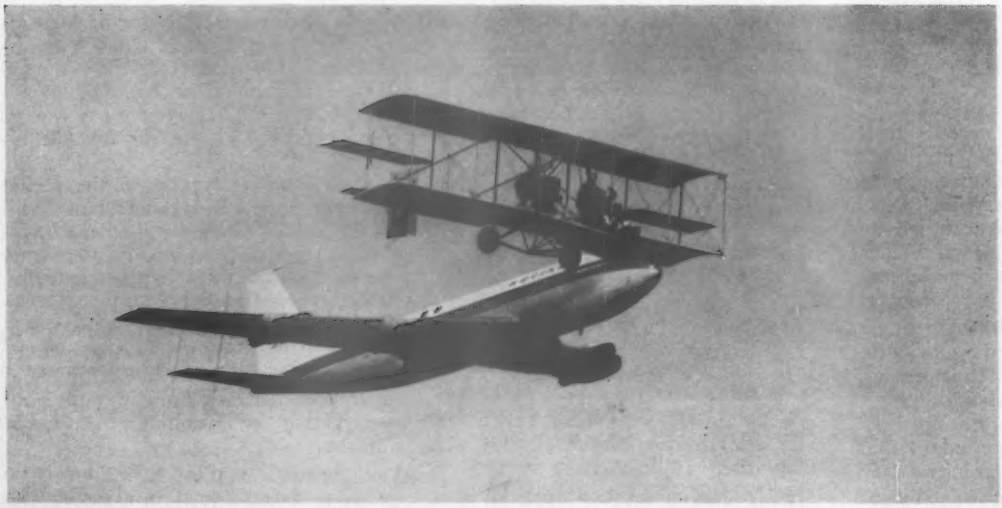
CAA safety inspectors are located in 86 district offices across the country and are available for consultation at any time and with any persons contemplating the launching of rockets or missles.

Pyle made it clear that there is no attempt on the part of the CAA to either discourage or to interfere with rocket or missile experiments. The only interest of the CAA in the matter

(Continued on Page 14)

THIS BOEING 707 Jet Stratoliner is currently undergoing flight tests in preparation for Civil Aeronautics Administration certification tests. The second production model is in preflight status and others are coming off the assembly line. Air line service is scheduled for early next year according to officials of the Boeing Airplane Company.

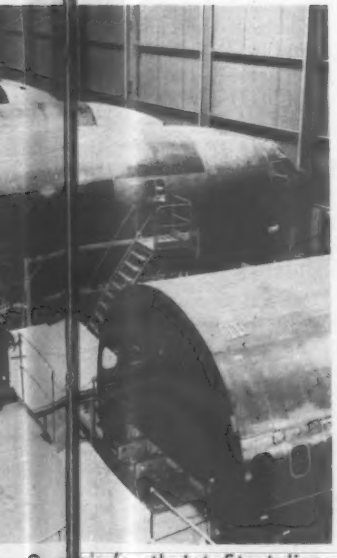
The
'707'
Spreads
Wings



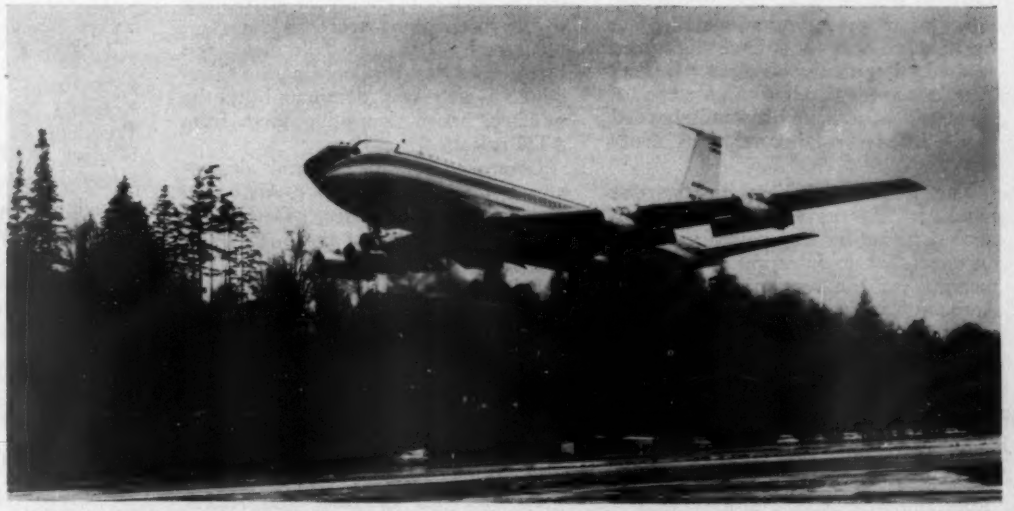
CONTRAST OF this year and yesteryear is shown as the Boeing 707 prototype jet transport streaks past an ancient Curtiss pusher plane of 1912 vintage. The pusher, piloted by Pete Bowers, Boeing flight test engineer, has a top speed of about 60 miles per hour.

BOEING Airplane Company's fourth takes shape in the company's new plant in Renton, Wash. Nos. 5 and behind it. The first three of the production ports, with large amounts of test installed, are to be used for CAA test version to passenger service.

MEMBERS OF THE ALPA-Boeing 707 Evaluation Committee study the cockpit arrangement of America's first production model jet airliner. The committee has been working closely with Boeing engineers and air line representatives since the plane was in planning stages. They are, left to right: S. D. Terrell (PAA), C. H. Daudt (AAL), Roy Holm (PAA), chairman of the ALPA committee, and C. L. Kraemer (AAL).



e Compa y's fourth jet Stratoliner
ne compa y's new transport division
Wash. Nos. 5 and 6 airplanes are
st three of the production jet trans-
amounts of test instrumentation in-
e used fo CAA testing before con-
nger servi e.



HERE IS the first takeoff of the Boeing 707 Stratoliner from Renton Municipal Airport, Washington. With weather conditions extremely bad, Pilot A. M. "Tex," Johnston flew directly to nearby Boeing Field. Later the same day the 600-mile-an-hour airplane was flown several times. A total of 162 of the Boeing commercial jets have been ordered by the 14 air lines.

Rocket Hazard . . .

(Continued From Page 11)

is the protection and safety of the flying public.

Proposed changes to Part 48, of the Civil Air Regulations would include these:

- Rockets and missiles shall not be fired except during daylight hours and only when ceiling is unlimited and visibility is unrestricted.
- Rockets and missiles shall not be fired unless spotters are placed in strategic positions to scan all directions and have determined that no aircraft are in sight.
- Rockets and missiles shall not be fired so as to be, at any time, within five miles from any airport.
- Rockets and missiles shall not be fired within or into control zones.
- Rockets and missiles shall not be fired on or into airways or other control areas if the trajectory may reasonably be expected to exceed 1,000 feet above the surface.
- Rockets and missiles shall not be fired within control areas, or elsewhere, unless the site to be utilized for the firing is approved by the Administrator.

Pass Rule Suspended

The Civil Aeronautics Board has suspended its current interpretation of who is entitled to free air line passes in order to enable Congress to consider possible legislation on the matter.

Last October the CAB had moved to tighten up air line free pass practices. In a letter to all air lines, it said views of many interested parties, not available at that time, have since been studied, that many of these practices "are of long standing and some of them appear to have become imbedded in the industry's labor relations structure."

The Board's problem on the one hand is to prevent discrimination against ticket-buying passengers, and on the other to interpret the specific meaning of the section of the Civil Aeronautics Act which allows free air transportation to air line "directors, officers, and employees and their immediate families."

In its October statement to air lines the CAB said "immediate families," could mean only spouses, minor children, and persons residing in the "intimate household" as part of the family, including tutors, nurses or attendants. It excluded such persons as retired employees or employees' survivors.

A bill introduced by Sen. Thye (R., Minn.), now pending before the Senate Interstate and Foreign Commerce Committee, would give air lines the right to issue passes to "retired directors, officers, and employees and their immediate families."

The CAB said it will notify the Committee's Chairman, Sen. Magnuson (D., Wash.), that it has no objection to the bill. The Board will also point out that it is suspending its interpretation of the present law until September 1, to give Congress an opportunity to consider the entire free pass problem.

CAA Rules Airspace

Effective April 1, the CAA will allocate airspace for the military as well as all other aircraft.

The new CAR ending military dominance of the airways, accomplishing a long time objective of ALPA, was ordered February 15, by the CAB, and provides CAA control except when noncompliance with ATC rules would be required by military emergency or current military necessity essential to the defense of the U. S.

Deviation of the rule requires prior notice to the CAA.

Under the regulation, the CAA also is authorized to establish blocks of airspace for restricted use when it finds such action necessary to assure safety of aircraft in flight; it provides that the CAA may impose such terms, conditions, and limitations as it may deem necessary, and it requires the CAA administrator to provide all interested parties full opportunity to participate in the rule making processes.

Heretofore airspace allotment was by order of the Air Coordinating Committee which was dominated by the military, hence exempting them from ATC rules.

Composed of the federal departments of State, Army, Navy, Air Force, Treasury, Post Office, Commerce, CAB, FCC, Bureau of the Budget and the Office of Defense Mobilization, unanimous decision was required in the allocation of airspace.

This situation had, in the last seven years, led to a 50 per cent increase in the number of airspace reservation for the military while civil users obtained none although the civil airways mileage doubled in the same amount of time.

To end this situation, the ALPA and other civil air users have long protested to the federal regulatory agencies, Congress, and, in some instances, directly to the public.

In its action in amending the CAR, the CAB noted the constant increase of all types of air traffic—air line, business, private, and military—and said this increase has "created increasing problems in resolving conflicts in the allocation of airspace. . . . The problem of diminishing airspace has become so acute that the government can no longer accommodate all the needs of individual users without judiciously weighing the interests of all users to determine what is most in the public interest."

Kerosene For Jets

Airlines, after considerable debate over whether to use JP-4 or kerosene in their jet aircraft, have decided on the latter. Carriers will use ASTM Type A which has a freezing point of —58F. Decision probably will be formally ratified by the technical committee of the International Air Transport Assn. Petroleum company sources say a round figure for the cost of the kerosene in quantity would be 15 cents per gal.

International Briefs

Many items of international aviation interest are on the agenda of the conference of the International Federation of Air Line Pilots Associations in Bogota, Colombia, March 11-18.

Clarence N. Sayen, president of ALPA, is also president of IFALPA. Delegates are R. L. Tuxbury, ALPA secretary; C. C. Spencer, Jr., ALPA Region I vice president, IFALPA Vice President F. T. Sterling, and T. G. Linnert, ALPA engineering and air safety department.

Included on the conference program are these subjects:

- General aspects of IFALPA representation on the Jet Operations Requirements panel.
- Interchange agreements.
- Assistance to member organizations during a strike.
- Flight time and duty time.
- Comparison of salaries.
- Medical Standards for Pilots.
- Crew complement (third flight crew member).
- Accident investigation, and rules of the air, air traffic control, and search and rescue.

Along the Line . . .

Here and There With Air Line Pilots at Work and Play

Aloha Captain Wins Cheers For Time Aloft

CAPTAIN ALLAN W. OLSON is a 24,000-hour man.

At approximately 10:35 a.m., Sunday, December, 15, on Aloha Airlines's Flight No. 63, 10 minutes off of Hilo, the cabin buzzer sounded, lights flashed on and off in the passenger cabin and Stewardess Mellie Recopuerto entered the pilots' cabin bearing a tray with three cups of pineapple juice.

Copilot Charles Tyson turned to Capt. Olson and said:

"Congratulations, Captain! ! !"

For Hawaii's most experienced air line Captain had just rounded out another thousand hours in the air. No other pilot flying between the Islands can come close to his record.

The debonair Captain's record is the equivalent of more than 160 trips around the world or more than eight round trips to the moon. Locally, it is the equivalent of more than 9,000 round trips to Hilo. It is also the equivalent of more than two years and nine months of continuous flying without stop.

Flying 30 Years

Captain Olson soloed August 5, 1927. He has flown with various air lines including Pan American World Airways, Northwest Orient, Braniff, Avianca and Mid-Continent.

A flight captain since 1929, Olson has seen service in the Mainland U. S., Canada, Mexico, Central and South America.

Late in March, 1931, Captain Olson flew relief supplies into Managua, Nicaragua, after an earthquake had devasted the area.

His graphic eye-witness description of the stricken city was relayed to all parts of the world by Associated Press and United Press.

Famous persons piloted by Captain Olson include America's late beloved humorist Will Rogers, former heavyweight champion Max Baer, Red Grange, Mrs. Eleanor Roosevelt and two young men later destined to rule the British Empire: the Prince of Wales, who became Edward VIII and abdicated to become the Duke of Windsor, and Prince George, who became George VI, father of Britain's Queen Elizabeth II. Captain Olson piloted the royal party when the two future monarchs were in South America on a "business trip," to improve British trade relations.

Capt. A. W. Olson

Navy Service

During World War II, Captain Olson served with the U. S. Naval Air Service from 1942 to 1946. His duties included assignments as plane commander, check pilot, instrument instructor, flight training officer, flight officer and operations officer. He presently holds the rank of Commander, USNR.

He joined Aloha Airline in 1946, and holds the distinction of piloting the air line's inaugural flight on July 26, 1946.

Captain Olson was born in Montevideo, Minnesota, and was educated in California and the University of North Dakota. Captain and Mrs. Olson, the former Ethel J. Severson, have two children, Martin and Nancy.

The Olson's reside at 3314 Kahawalu Drive, Honolulu.

A Believer Now

Capt. W. J. Hull, who four years ago took pen in hand to debunk the flying saucer mania, now belongs to the "seeing is believing" school. He reported sighting what appeared to be a saucer while in flight over Mobile, Alabama, last year.

Meanwhile, back in another Viscount, this year, Capt. Darrall Hammarley and First Officer Tom St. Denis told of seeing the Russian satellite Sputnik over Michigan.

The saucer episode took place on November 14, 1957, when Hull encountered what he first thought was a brilliant meteor. In a published article for the National Investigations Committee on Aerial Phenomena, he said the "meteor," described as having a light intensity "seven or eight times that of Venus," halted its downward plunge directly in front of the plane.

"It then began a series of violent maneuvers, sharper than any known aircraft, sometimes changing direction 90 degrees in an instant," Hull wrote. "It finally zoomed up at an extremely sharp angle and shot out of sight," he added.

Twenty-nine Capital passengers, bound for Milwaukee, got an eagle's eye view of Sputnik, thanks to the accurate calculations of Capt. Hammarley. On the night of October 24th, figuring to spot the man made satellite some 66 minutes after a Detroit departure, the Captain told his passengers to turn out the cabin lights. About half an hour later, Sputnik appeared streaking almost due northward and above the cup of the Big Dipper.

Long Overshoot

Since Capital Airlines is engaged essentially in flying relatively short hauls in the east and midwest, it was an extraordinary occasion when a plane was chartered to carry a group to Japan.

When Capt. Edward Couples deplaned at the Tokyo airfield he came face to face with an old friend from the states. The latter looked with amazed disbelief at the captain and then at the plane with the familiar legend, "Capital Airlines," on its side.

With a grin he asked, "What happened, Ed? Did you overshoot Minneapolis?"

* * *

CAPTAIN J. W. WHEELER, Downers Grove, Ill., has been appointed district manager of flight operations in Chicago for Trans World Airlines. He joined TWA in 1942, and served as a special representative to the Turkish government in 1946, to assist in establishing the Turkish Airlines. Before his appointment he was supervisor of flying for TWA in Detroit.

AMERICAN AIRLINES Captain Vernon Byrne crowns pretty Jackie Walker, chosen "Miss Photoflash of 1958," by the Chicago Press Photographers. She performed her first official duty by christening American's new DC-7 "Captain's Flagship," service between Chicago and Washington, D. C.

MISS PRESENTACION ABELLA, secretary of the Air Line Pilots Association of The Philippines, visits the home office of ALPA while on tour of the U. S. "Presy," as she likes to be called, studied the ALPA operation closely for use in her organization. She says the ALPAP, organized in 1948, has more than 100 members and is affiliated with the International Federation of Air Line Pilots Associations. Presy's tour is taking her around the world.

COLONEL "Russ," Black, Stony Brook, Long Island, N. Y., a veteran Captain with TWA, has been commended by the USAF for his work during a joint Army-Air Force Reserve training maneuver at Fort Bragg, N. C. Col. Black served as wing commander of the 514th Troop Carrier Wing during the large scale maneuvers.

On Improving Passenger Service

By Charles H. Dolson
Vice President — Operations
Delta Air Lines

THE quality of passenger service during the next decade is going to be an increasingly important factor in assuring air line operators a fair share of the 40 billion passenger miles which experts predict will be flown in a single year.

If Delta Air Lines had been able to entice just one more passenger on each and every flight during the last fiscal year, its net income would have been increased by nearly 50 per cent, taking into account the present income tax laws. This is because our net profit was very nearly equal to the revenue derived from a single passenger on every Delta flight, together with the average passenger's excess baggage.

Passenger service has many facets, but viewed from an engineering standpoint these are some possible interesting objectives.

- Ground transportation times must not be permitted to increase.
- Timely and accurate "flight information," must be available to the public.
- "Space availability," i.e., reservations service, must be near instantaneous.
- Passenger processing must be made as simple as possible and, to the extent practicable, avoid today's marshalling procedures.
- Baggage processing must proceed at a pace at least as fast as passenger processing.
- Both passengers and baggage must be protected, particularly from the weather, to a much greater extent than is presently the case.
- "In flight," passenger service must be continuously reviewed and improved partly through improvements in interior design, partly through improvements in procedures, and partly through the addition of more cabin convenience.

Tied-In Problems

The matter of flight information is tied into the inadequacy of our airways traffic control system, the over-taxing of airport capacity, particularly during peak periods, and the overloading of terminal area facilities. Sometime in the future, when voice communications between controllers and pilots are supplanted by a visual or written instruction system, it may be feasible through electro-mechanical means to give a "flight follower," at each station exactly the same information that is given the pilot. Such a system, coupled with a vastly improved air traffic control system, may solve the problem of insufficient flight information for passengers.

The solution of the baggage handling problem seems to lie definitely in the engineering field. With the coming of turbine-powered airplanes having much higher speeds and generally much greater passenger capacities than present-day craft and with the forecast increase in business, air lines cannot afford to continue the use of present baggage handling procedures or devices.

We can envision a system wherein a man with three pieces of luggage arrives at the airport for a flight. Within a few feet of the point at which he disembarks from his ground transportation his luggage is weighed and checked to its destination via the correct routing. At the time of weighing, each baggage tag is stamped with the weight of the individual piece and this is also reproduced behind the scenes at the "load control desk." When all of his luggage has been weighed and tagged, the weighing machine must be cleared in order to take care of the next passenger.

In clearing the machine, the passenger's ticket is stamped, showing the flight number, number of pieces of luggage and their total weight, and this also is reproduced at the load control desk. If his luggage is within limits, he has nothing more to do but board his flight. If he is over the allowance, he must go to the air line counter and pay the fee for excess and have his ticket revalidated. In the meantime, since he was *ahead* of the arrival of his flight, his baggage has gone via endless belt or in a basket on an overhead monorail, or by whatever means that can be devised to a baggage marshalling room.

It will be dispatched together with all other baggage accumulated for that particular flight as soon as the flight is "in." However, had the passenger arrived at the airport *after* the arrival of his flight, his baggage would have continued through the baggage marshalling room without delay. Although no air line could possibly afford such a system now, it is not far-fetched.

Terminal Question

As far as "terminal building passenger service," is concerned there seems to be no agreement insofar as terminal building design for turbine-powered aircraft is concerned.

Nobody, so far, has determined how far a passenger is willing to walk to board his flight, how many times he is willing to change levels, or how many services or how much service he really demands in the terminal area.

In this particular field, these things seem evident:

(1) The average passenger does not want to change levels any more often than is absolutely necessary. (2) The average passenger wants to get in the area of his particular flight rather early. (3) The average passenger wants protection from the elements from the time of his arrival at the ground transportation disembarkation point up to and through his embarkation on ground transportation at his point of destination.

Several ways of protecting passengers from inclement weather have been tried, and with the coming of jet transports this problem again is being studied. It may be that a tunnel finger system, coupled with satellite passenger waiting rooms and either bridge or nose dock loading, will be the most satisfactory solution, especially when protection from noise and blast is added to weather protection.

Some of the air lines, and especially those who expect to operate large turbo-jets in high-density configurations, feel that the "trickle," system for passenger loading is highly desirable. To require that 150 or so passengers be collected at a gate position or satellite waiting room requires too much space. Either the bridge or nose dock system lends itself very well to this loading procedure.

These and many more objectives are being considered. But if many improvements in passenger service are to be accomplished, a substantial and long overdue fare increase must be granted.

Meet Your Officers

Capt. H. B. Anders

NEWEST in the ranks of Air Line Pilots Association elected officers is Captain H. B. (Andy) Anders (UAL), Vice President of Region V. Captain Anders, 41, who as a veteran of long, conscientious ALPA service, represents the largest regional area of the Association structure. His area encompasses councils in such points as Alaska, Hawaii, Japan, Hong Kong and in addition to the West Coast states extends east to include Boise, Ida., and Las Vegas, Nev.

A native of Ohio, Captain Anders attended Ohio University, where he participated in the first Civil Pilot Training program instituted by the government prior to World War II. On graduation with a bachelor's degree in civil engineering, he continued his flying training while employed by an engineering firm in Cleveland. His air line career with United began in 1940, and since that time he has logged approximately 15,000 hours over most of the company's routes while based in the western half of the United States.

In ALPA Since 1941

A member of ALPA since 1941, he was elected to his first ALPA office in 1945, as Chairman of the UAL ALPA Council at Salt Lake City. In addition to serving on various UAL ALPA committees, he served on the UAL negotiating committee from 1949 through 1951, was chairman of the committee and chairman of the UAL Master Executive Council in 1951. Andy recalls it was a rather busy year, one in which flying the line ran a poor second to ALPA duty—two months of flying 10 months for the pilots.

Captain Anders currently is based in Seattle and flies a regular DC-7 run, Seattle to Chicago. During World War II he was assigned to the Air Transport Command Service in Alaska areas and served as a civilian instructor for the military under contracts between United and the military service.

A Fisherman

Although his prime interest is flying and ALPA, Captain Anders is active in other lines of endeavor. The most prominent of these is trout and Steelhead fishing in the Northwest Country and British Columbia. Not exactly a purist in the true sense (he uses spinning gear for Steelhead and salmon), his favorite is the dry fly. His largest catch on standard dry fly trout tackle was a sixteen-pound, eight ounce Rainbow on a Royal Coachman #8 in 1952.

Married, Captain Anders has two sons, Eric and Marc. Of course, they too, are ardent fishermen and outdoorsmen. A boat on top of the station

(Continued on Page 23)

Pilots' International Role

ONE of the more comforting and significant features of international meetings on air transport operational matters during the past year or two has been the growing and increasing valuable part being played by representatives of the air line pilots associations.

Whereas only a few years ago the transport pilot was expected to be seen and not heard (except over radio) he is now able to take (and is taking) a more than professional interest in the problems for the future and in the means by which these problems are (or are not) being solved.

Everybody in the air transport business has a natural wish that pilots should take an interest in the future of their own environment, and should offer the industry the benefit of their considerable experience.

But it is now beginning to be apparent that the pilots—and maybe only the pilots—have practical experience and knowledge as well as a united strength capable of forcing the authorities, however gently, to do something positive about meeting the essential operational requirements for the so-called jet age.

IFALPA Advances

The pilots, through their associations and, in particular, through the International Federation of Air Line Pilots Associations, are, in fact, the representatives of the air line industry who will have to carry the major burden of responsibility in making a success of air transport operations in the 1960s.

They, helped by the navigational equipment and systems on which they rely, will be the only members of the industry who are, in the ultimate, able to make large-scale turbojet operations both economic and safe. Put in simplest terms, the air lines, are likely to be made or broken by the performance put up by their flight-deck crews.

So maybe, when other air line technical representatives have nothing more constructive to offer, we had better listen to the pilots. They, at least, have practical experiences to guide them in their appreciation of the way in which the efficiency of communications and associated radio navigational aids can affect future turbojet operating economics.

The pilots are also the first to arrive at the scene of any aircraft accident—so they have a vested interest in safety and are not likely to say, "it will be all right on the day."

Facts Of Life

Meanwhile, so far as verbatim or first-hand reports are available, IFALPA representatives appear also to be doing valuable work in keeping the practical facts of life in front of the various international meetings and in pointing out one or two of the more obvious errors resulting from a too-academic approach to the various problems.

It was an IFALPA representative, for instance, who pointed out at a recent regional air navigation committee meeting that the rates of descent used in an IATA report on certain air traffic control problems were based on airframe rather than on depressurization limitations. He succeeded in getting some modifying sentences introduced before the entire appendix was, in fact, deleted as being misleading.

At another meeting the IFALPA representative asked for, and got, some firm introductory air line evaluation dates for long-range navaids which had been put forward by different delegations. These dates ranged from December, 1957 (Dectra), to about 1963.

Long Term View

More important, from the long-term point of view, was an IFALPA representative's demand, at the sixth ICAO Communications Division session, for some advice about the practicability of a concept in which position information could be recorded continuously, made automatically available to control centres and other aircraft crews, and used to provide information for a continuous A.T.C. display.

Such a system was agreed to be "philosophically possible," and the question produced a comment from ICAO that there had been an alarming reluctance on the part of operators and operating people "to express a requirement before they were aware of the solution."

On a more immediately practical question, it was an air line pilot who pointed out, during an ICAO discussion on the best dividing height between future lower and upper air spaces, the practical disadvantages of the agreed height of 20,000 ft.

This choice of height meant that in summer months (the busiest period) many heavily laden turboprop aircraft would, initially, only just be able to reach the upper airways. They would, naturally all choose the lowest level in this upper air space and would then be quite unable to climb the 2,000 ft. or more to reach the next approved level.

Lower-Upper Airways

IFALPA is in favour of a lower-upper-airway division height of 25,000 ft., and/or of the use of lateral separations by means of different routeings, with clearances given to the next available altitude on an upper airway when enough fuel has been burnt off.

The Association has already won

(Continued on Page 20)

Estate Planning . . .

(Continued From Page 6)

fectively combine these two programs in a life insurance policy.

Think about this for a minute: How many people do you know that have retired in comfort from their savings in life insurance? I have yet to meet a single person who has done so in spite of all the advertisements to the contrary. It is my conclusion that life insurance savings cannot begin to solve the retirement problem because of (1) high costs, (2) low yield, and, (3) inflation.

When the life underwriter who is soliciting you regarding the purchase of a savings type policy asks, "Where can you invest your money?" have him take a look at some life insurance company stocks. Connecticut General Life Insurance Company has been particularly active in "planning estates," for air line pilots. If one had purchased $1,000 worth of stock in Connecticut General in June, 1943, his investment would have been worth $42,600 by 1957! Many other stock life insurance companies have done equally as well.

Many life underwriters will dismiss advocates of term insurance as "termites" and tell you that "term insurance is temporary insurance and therefore not suitable for permanent needs."

In his book, "A Formula For Financial Independence," William B. Rudd, a Chartered Life Underwriter and holder of a Masters Degree in Insurance from the University of Pennsylvania, and currently a lecturer in Business Administration and Insurance at Sacramento State College, has this to say:

"Term insurance is temporary insurance, but remember, all life insurance policies are term or term coupled with savings. Since the cost of term insurance becomes prohibitive at older ages and term insurance is the insurance element of every life insurance policy, it is clear that no life insurance policy is really suitable for the protection of a permanent need.

"But what is a permanent need? A careful study of the subject suggests that there are few, if any, permanent needs. A fundamental principle of insurance is that we insure only economic (as opposed to sentimental) values. If there exists no economic value, there is no justification for insurance.

How much economic value is wrapped up in one's future earning power after retirement? Usually there is none; therefore, there is little, if any, reason for life insurance at or after retirement."

Not Thrifty

Many life underwriters will attempt to justify life insurance policies as a compulsory means of saving. Let us examine the record. In 1956, life insurance companies paid less than 3 billion dollars in death benefits while receiving 18 billion income and increasing their assets to nearly 100 billion. During 1955, mortality of policies (lapses) was over six times the mortality of those who carried them. Just because a premium notice comes in the mail at regular intervals does not make a person thrifty. Again quoting Mr. Rudd:

"Those who have the incentive to save and the surplus income for saving can save with or without the 'regimentation,' of life insurance. Those who lack one or both of these essential elements are probably outside the scope of private enterprise."

People save if their income permits it and they really want to. Real savers will reject life insurance as a proper means to save. They will put their savings regularly and systematically where they belongs: in banks, good mutual funds, mortgages on real estate — but not in life insurance. So forget the nonsense that life insurance helps you save. If you are a saver, you will accumulate property, and if you are a spendthrift you will always be buying your automobiles on time and supporting the small loan companies.

The record shows that an improperly sold policy can ruin thrift and destroy protection. This regularly happens under the not uncommon situation where a pilot has been sold the wrong kind of policy. The eager life underwriter with his eye focused on the commission signs the pilot up and commits him to larger premiums than he can probably pay. So what happens? He doesn't partake of the fine coverage offered by ALPA and the company for which he flies and when adversity strikes, he lapses the high premium policy because he can't meet the payments. Is this thrift? Or protection? It is neither.

Junk Insurance

Let's quit buying this junk these insurance peddlers are pushing and get the protection that is available to us. Then, if we have any money left, pay for our home, or put it in the ALPA Credit Union, or a good mutual fund, or buy some Connecticut General stock.

A life underwriter might ask: "Can your wife properly manage all that money? An insurance company will mail her a check every month. We will manage it free of cost as long as she lives."

Actually life insurance companies and life underwriters don't do anything free. They charge plenty!

The best way to handle your insurance estate if you are concerned about your wife's ability to manage money is to make your bank your beneficiary under the terms of a life insurance trust agreement. The trust officer at your bank will recommend an attorney who is competent to draw up a trust agreement to meet your requirements. The attorney's fee is usually quite nominal.

The bank will not charge a fee until the trust agreement is placed in operation at your death. Thereafter their fee will be one half of 1% per annum for managing the estate. If you live until retirement the need for protection will cease and the trust agreement will terminate.

Professional Interest . . .

(Continued From Page 19)

quite a number of good points—including a demand for full IFR control in the upper (20,000-40,000 ft.) airways —but there is much more hard fighting to be done.

There are, after all, a great many problems and difficulties which only the practising pilot can appreciate. Even in the much more simple days of the past it was an exceptionally imaginative engineer who understood fully the effects of propeller constant-speeding and the use of the fine-pitch stop when adjusting this for a limited-range propeller in different run-up conditions.

It was an even more imaginative flight-shed foreman who, in days of visual flying, could understand why test work might be continued on revolting days of heavy rain or "fog," yet he abandoned in apparently similar weather.

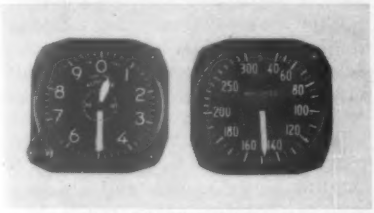
Those, happily, were the days when a professional pilot was, at the best, considered to have superhuman qualities—or was, at the worst, permitted to enjoy a little human temperament in the face of difficulties.

Today, the air line and Service pilots are expected to be well-trained, error-proof machines capable of coping efficiently with almost any combination of unfavourable circumstances.—*Reprinted from "The Aeroplane."*

T-Effect . . .

(Continued From Page 9)

Distance flown was six hundred and twenty-six miles. Time, approximately five hours. Altitude, 500 feet down to 30 feet. For the benefit of the skeptics, we flew reciprocal headings to offset any wind effect. The sea remained constant; generally five-foot swells. One point worthy of note is the exceptional increase in air speed noted in the first chart. This may be due, in



500 Ft. IAS 147.5

part, to entering an area of additional humidity, for just before encountering a small rain shower the air speed indicator took a decided jump forward. It is possible that the addition of moisture in the air resulted in an increase in aircraft performance. However, the second rise in performance noted in chart No. 2, again shows a small increase in operational efficiency upon reaching the T-Effect area. We will discuss this difference in a moment.

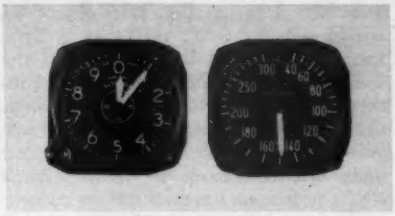
T-Effect Flight Check
3 October 1957
Outbound Track 028 degrees
Total Distance: 300 nautical miles

Alt.	M/P	RPM	IAS	OAT	TAS
500′	31.5	1,600	147.5	26°C	152
400′	31.5	1,600	148	26	152
300′	31.5	1,600	147.5	26	151.5
200′	31.5	1,600	147.5	26.5	151
100′	31.5	1,600	152	26	155.5
50′	31.5	1,600	143	26	146
125′	31.5	1,600	147.5	26.5	151.5
75/90′	31.5	1,600	155.5	26	159

It is significant to note that as the aircraft descended toward the surface, airspeed progressively increased down

Same IAS

to the 100 foot mark. For the sake of the record, each 100 foot increment was made at 10 minute intervals. In other words, the increase in airspeed cannot be attributed to a descending attitude. Power was reduced and then



Close To "T"

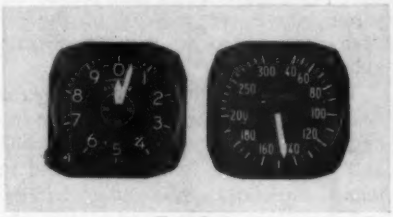
reestablished at each level and speed stabilized before readings were taken.

There was a 9-knot loss in indicated air speed between 100 feet and 50 feet, then, as the aircraft was brought up to the 125 foot level, the airspeed jumped to 147.5.

Feel It Out

At this point, Major Tyson pointed out that we had gone through the T-Effect area twice.

"Now," he said, "I want you to feel the airplane down very gently to between 90 and 70 feet. Make no abrupt pressure changes on the yoke. Leave the trim alone. Set the radio altimeter at 75 feet and then use the middle (amber) light as a guide. Finally, watch the air speed indicator."



Too Low

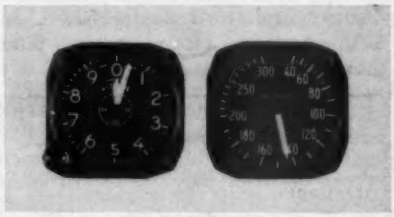
At approximately 80 feet, the airspeed jumped to 155.5 knots. We were definitely in the T-Effect area.

Here then, is a tip on flying within the narrow stream of air that makes up the T-Effect area. Make certain that the plane is trimmed for level flight before getting close to the water. We suggest you make your last trim not lower than 200 feet. As the aircraft enters the stream of undisturbed air, control pressures will be practically nil. However, if the plane starts to descend below the T-Area, an immediate nose-heavy moment will be experienced. Conversely, if the craft is allowed to rise above the area, the machine will start to get tail-heavy at once. Under both conditions the airspeed will decrease. That alone should give you fair warning that you are getting away from your little mystery helper.

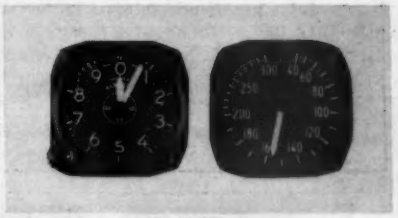
For the sake of being completely factual, we have included True Air Speed in the foregoing chart. In reality however, if you should find yourself in a bind and have insufficient power to stay upstairs, then your only real interest would be Indicated Speed. That would be the one factor which would govern your power settings. Once in the T-Effect area you would

Close Again

use the air speed indicator to determine just how far manifold pressure could be reduced. Why? Because you would want to prolong engine life and extend the cruising range.



No Go



"T" Effect

Quite a number of runs were made following the one previously recorded. Conditions remained generally the same and air speed increases of 8 to 10 knots were experienced in the T-Effect level. Finally, having tracked out for 300 miles and then flown a reciprocal course for approximately 200 miles, the last run was made and is reflected in the following table.

Alt.	M/P	RPM	IAS	OAT
500′	30.5	1,600	146	24°C
400′	30.5	1,600	145	25
300′	30.5	1,600	146	26
200′	30.5	1,600	146	26
100′	30.5	1,600	148	26.5
50′	30.5	1,600	146	26.5
125′	30.5	1,600	148	27
75/90′	30.5	1,600	150	27

It will be evident by comparing the two tables that we were experiencing an increase in outside air temperature

and a consequent reduction in air speed. However, neither temperature nor humidity can account for such a definite speed loss.

Land Mass Barrier

We questioned Tyson about this and he pointed at the island of Oahu coming up fast.

"That's your answer," he said. "As soon as you get close to a land mass, you will find that the T-Effect disappears completely. I certainly haven't worked out any rule-of-thumb on that as yet. But, I have pretty well established what I believe to be a fact. Once you are near land and start experiencing the temperature changes that accompany this geographical shift, the T-Effect peters out. There may be several reasons for this. Disturbed air flow from hills; the beginning of thermals; pressure changes; change in humidity; all these factors may enter the picture. Frankly, I don't know . . . Yet! I'm going to sooner or later though."

ALPA Members

Save on furniture, carpet, drapes.

Buy at actual cost plus small fee.

Advise me, if possible, of factory name and piece number.

George H. Burch
Moore Furniture Bldg.
191 N.E. 40th St.
Miami, Fla.

Before leaving the last chart we would like to point out that a little speed was gained by getting into the T-Effect area. Indicated speed had increased from 146 to 150 and although the temperature was showing an upswing, manifold had been reduced one inch. On that basis, it would appear that a further reduction in power could have been made with a constant reduction in fuel consumption and a net gain in cruising range.

Our next tests will be made using a C-124.

We are fully aware that many readers will claim we're doing a lot of guessing in this article. Okay, so we are. However, we defy anyone to pick up a book devoted to the theory of flight and completely prove every statement. Sure, you can diagram everything on a blackboard and say, "here is the evidence." Frankly, we can do the same thing with T-Effect.

It is our belief that there exists within the air a boundary layer close to the surface of the sea in which the impact pressure is reduced as a result of the viscosity of the fluid (air). In other words, this boundary layer is a thin zone, close to the surface of the water where the velocity of the air varies from zero to the air directly above and below.

The air below the unaffected area is constantly churning and changing because of the water action. Waves swell and roll. The air in turn is forced in many directions. Molecular friction and compression may well enter into the picture.

It is an established fact that if a layer of air is moving slowly, some of the molecules from the upper layer will move into the lower layer and increase in velocity. If any molecules wander from the lower to the upper layer, they will reduce the velocity of the upper layer. It would appear then that there must be a narrow area where one action and one reaction must, to all intent and purpose, nullify one another. It is there then, that we find the narrow band where all force and motion is approaching a null.

One reason behind this thinking is the fact that waves may appear to roll in a given direction, however, this is but a shallow, surface indication. The main body of the water is not being affected by wind at all. You can prove that easily by running your hand over the nap of a deep pile rug. In essence, you can create waves much as the wind does. But, do you move the rug itself?

Now, consider the fact that the rapid movement of an air mass does affect the sea, but, here again, only a shallow layer of the surface. Actually then, the movements of the wind across the surface results in "building-in" resistance. Waves that are created by the wind action then act as resistance to the air mass flow. Unlike the wind tunnel, where a steady velocity can be maintained, the air flow is constantly interrupted, changed, diverted, blocked, compressed, rolled and rendered unstable. Nevertheless, the basic force continues uninterrupted and it is here that we find a shear line between the surface-disturbed air and that immediately above. If our findings are correct (and we sincerely believe they are), then the narrow band of relatively undisturbed air is the area in which the pilot can find minimum disturbance and plan for maximum efficiency from his aircraft.

In winding up this article we'd like to reiterate our stand. The T-Effect does exist. If you don't like our theory, dig up one of your own. The photographs that accompany this story tell the tale pretty well. Again, you can take 'em or leave 'em.

Remember

However, we suggest that if the day ever comes whereby you find yourself fresh out of one or two engines and have to keep on keeping on, then, by George, best you give this T-Effect a whirl. Further, we strongly recommend that you maintain a respectable altitude as long as all power units are functioning normally. Why? Well, Sir,

Frank South LUGGAGE

ANNOUNCEMENT! We are proud to announce our new factory connection, one of the finest brief case manufacturers in the world, who now builds these bags to our strict specifications.

OUR NEW EXCLUSIVE "PILOT'S FAVORITE"

Made to our latest specifications—Stronger—better—handsomer—finest specimen of luggage-craftsmanship. This handsome new bag made of FINEST, select, 6 oz. top-grain cowhide.

No. 726

NOW built with solid steel frame on top flap for rigid anchoring of 2 solid brass locks.

NEW, non-sagging top with 3-ply veneered-wood reinforcement. Extra strength, yet light weight. These new features at no additional cost to you. Colors, Black, Tan and Ginger.

Size 16" x 7" x 11½" outside dimensions. Retail price, $29.95. Low cost to you— **$18.95**

Size 18" x 7½" x 13" outside dimensions. Retail price, $32.50. Low cost to you— **$19.95**

All prices plus F.E. tax of 10% plus $1.00 shipping charge.

We sell a full line of top-quality, business type brief cases and men's hanger bags. Your satisfaction absolutely guaranteed or your money back within ten days. No. C.O.D.'s, please.

Write or phone for catalogue

Frank South

Owned and operated by ALPA member

P. O. Box 13366 Fort Worth 18, Texas Telephone, AT 4-8383

this writer isn't going to recommend any hedge-hopping. You know the rules on that subject pretty well by now . . . but, if the chips are down and you are too, remember, once you send that Mayday, you can choose your own altitude and legally too. If the altitude is within the T-Effect area we're betting you'll get home.

One last thought. It's difficult to eye-ball a hundred feet above the drink. We doubt that anyone could fly this low at night or during periods of restricted visibility without the aid of a radio altimeter. Major Sam didn't have one on his epochmaking flight and it was a nerve wracking business, to say the least. Fortunately he did have daylight conditions.

And, where is the T-Effect stream? Depending on wind and weather you'll find it between 70 and 125 feet above the surface of the sea. We're hoping that you'll never have to hunt for it.

Overseas Traffic Up

International Air Transport Assn. reports that airline summer schedules for this summer will begin three weeks earlier according to timetable arrangements being prepared by IATA members. Summer schedules will go into effect on April 1, rather than late April as before, and remain in effect until Oct. 31. There will be IATA says, 20 per cent more passenger seats available.

Capt. Anders . . .

(Continued From Page 18)

wagon, a small 16-foot camping trailer and the Anders are self sufficient for days in the more inaccessible areas in Washington, Montana and British Columbia.

One of his frequent fishing companions is Captain Walt Fallon (UAL) of Seattle, who is also well known for his work as a pilot representative in ALPA.

After 15 years of flying, fishing and ALPA work, he and Fallon are now developing a new enterprise. At the present time, they are engaged in the furniture moving business, specializing in domestic and overseas shipments of household goods by Sea-Van.

The Anders live at 17029 Twenty-First Avenue S. W., Normandy Park, Seattle.

You TOO Can Be Among These Advertisers!

Address Your Message To An Above-Average Income Market!

A 2" Space Will Cost You Only $29.00

With Ample Discounts For Multiple Insertions.

Other Rates And Information Upon Request From The Air Line Pilot, 55th and Cicero Ave., Chicago 38, Ill.

ALPA MEMBERS:

write for free catalog
special membership discount
nationwide shipments

GERRY MOBURG & CO.

furniture - carpeting - appliances

2539 w. peterson rd. UPtown 8-7350
CHICAGO, ILL.

pilots employment agency

Teterboro Airport
Teterboro 5, New Jersey

Is Your Estate Planned?

If you should not live thru today would your family receive the benefits of a *planned* estate, or just a jumble of life insurance policies and "general" assets?

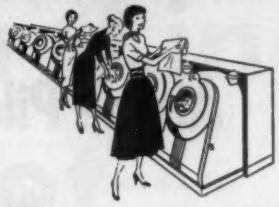
We offer our facilities and those of the Massachusetts Mutual Life Insurance Company to help you leave your family a *Planned Estate.*

No fee — Your Inquiry is solicited without obligation.

SCHIPPLOCK SALVESEN

ESTATE PLANNING & GENERAL INSURANCE
CHICAGO MIDWAY AIRPORT
POrtsmouth 7-6838 4848 W. 63rd St., Chicago 38, Ill.

OWN YOUR OWN BUSINESS AND BE READY FOR RETIREMENT



WILL YOU and your family have a protected income if the peculiarities of your profession force you into retirement?

Your present spare time can be used in building a depression-proof business. The unattended, coin-operated Westinghouse Laundromat® equipped laundry store is a proven way to add $4000-8000 to your annual income now . . . and in the years to come.

briefly, here's what it is:

1. **A coin-operated laundry store requires no attendants . . . all equipment is coin-metered and operated by customers as easily as soft drink vending machines. And because she does-it-herself, the housewife saves almost 50% on her weekly laundry bill.**

2. **A coin-operated laundry store is often open 24 hours a day, 7 days a week . . . providing a necessary modern laundry convenience for working people.**

here's what it does for you:

1. **Because it requires only a few hours of management time a week, it does not interfere with your regular profession.**

2. **Depreciation of equipment for tax purposes is rapid, and within a relatively short period, you own a going depression-proof business that actually runs itself.**

NO PREVIOUS experience is necessary. We offer advice, store planning, training and advertising . . . and we will finance up to 80% of the necessary equipment. We'd like to show you some coin-metered laundry stores in your area and give you full particulars on their operation . . . without obligation, of course. Just fill out the quick-action coupon below.

ALD, Inc. A
3549 N. Clark St.
Chicago, Ill.

Sounds good! Have your representative contact me.

Name _____

Address _____

City _____ *State* _____

© ALD, Inc., 1958

$25,000.00

(CASH, TAX FREE)

Airline Pilot Occupational Disability Insurance*

Non-Cancellable To Age 60

The coverage is designed to pay an airline pilot $25,000. cash, tax free, if he is permanently prevented from flying for his airline for physical reasons.

This coverage can only be provided on a group basis. If you are interested in obtaining it for your airline, ask your L.E.C. or M.E.C. chairman to contact us.

IF YOU ARE A PILOT OF A GROUP ALREADY INSURED

If your airline group is listed below you are still eligible to join if you are under 35 and have completed one year of service. You may join any time during your second year and the only requirement is a class 1 CAA medical less than 12 months old. If you have more than two years service you must take a physical examination to qualify. This examination may be made by any CAA medical examiner or your personal physician. Please contact us for the forms BEFORE you take the examination.

Pilot Groups Insured

- Bonanza Air Lines
- Canadian Pacific Airlines
- Capital Airlines
- Delta Air Lines
- Eastern Air Lines
- Frontier Airlines
- New York Airways
- Northeast Airlines
- Southern Airways
- Trans-Canada Air Lines
- West Coast Airlines

- UNITED STATES:

  Capt. Harvey W. Watt, Pres.,
  Aviation Insurance Agency, Inc.
  Atlanta Airport — Atlanta, Georgia

- CANADA:

  Capt. W. M. Benson, Exec. V. P.,
  Aviation Insurance Agency (Canada) Ltd.
  P. O. Box 35, Toronto 18, Ontario

- ENGLAND:

  Mr. John A. F. Miers, Director,
  Stewart Smith & Co., Ltd.
  No. 1 Seething Lane, London, England

"The best thing about being a captain is not having to fly with some of the captains you know."

* Copyright 1957